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- A method of blocking microbial adherence to a eukaryotic cell surface in a
  mammal by applying to said surface a pharmacologically acceptable composition
  comprising isoleucine present in a microbial blocking quantity.
- 5 2. The method of claim 1 wherein the microbial blocking quantity is in the range of from about 0.1 ug/cm<sup>2</sup> to about 1 gm/cm<sup>2</sup> of eukaryotic cell surface area.
  - 3. The method of claim 2 wherein said quantity is from about 3 ug/cm<sup>2</sup> to about 100 ug/cm<sup>2</sup>.
  - 4. The method of claim 2/wherein said quantity is from about 10 ug/cm<sup>2</sup> to about 100 ug/cm<sup>2</sup>.
  - 5. The method of claim 1 wherein the mammal is man.
  - 6. The method of claim 1 wherein the epithelial surface is one or more of the oral cavity, GI tract, respiratory tract, genitourinary tract, skin, eye, and vaginal/cervical area.
- 7. The method of claim 1 wherein the composition consists of a pure powder of L(+)-isoleucine and/or DL-isoleucine.
- 8. The method of claim 1 wherein the composition is in the form of a dry powder, a paste, a solution, a gel, a tablet, a lozenge, or a capsule., 90M, Spin, on the composition is directly applied to the
  - epithelial surface.
    - 10. The method of claim & wherein the composition is in the form of a pharmacologically acceptable aqueous composition containing from about 0.01 ug/ml to 50 ug/ml of isoleucine.

11. A pharmacologically acceptable composition comprising: from about 0.001 to about 99% by weight of isoleucine; A) B) at least one additional pharmacologically active substance; and, optionally, 5 C) pharmacologically acceptable carrier materials and/or excipients. 12. The composition if claim 11 wherein component A) is present in from about 0.002 to about 50% by weight. 13. The composition of claim 11 wherein component A) is present in from about 0.1 to about 25% by weight. 14. The composition of claim 11 wherein said composition is in the form of a dental 10 care product. 15. The composition of claim 14 wherein component B) is one or more of a fluoride, xylitol, an antibody, and an anti-microbial agent. 16. The composition of claim 14 wherein the composition is in the form of a 15 toothpaste or a gel. 17. The composition of claim 14/wherein the composition is in the form of a denture adhesive or gel. 18. A toothpaste or gel comprising a eukaryotic cell surface blocking quantity of isoleucine. 19. The composition of claim 11/wherein the composition is in the form of a chewing 20 gum. 20. The composition of claim 19 wherein component B) is one or more of an

antimicrobial substance and xylitol.

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- 21. A chewing gum comprising a eukaryotic cell blocking quantity of isoleucine.
- 22. The composition of claim 11 wherein the composition is in the form of a hard candy or lozenge.
- 23. The composition of claim 11 wherein the composition is coated on dental floss.
- 5 24. The composition of claim 11 wherein the composition is in the form of a vaginal gel.
  - 25. The composition of claim 24 wherein component B) is a antifungal and/or antimicrobial substance.
  - 26. A vaginal gel comprising a eukaryotic cell surface blocking quantity of isoleucine.
  - 27. The composition of claim W wherein the composition is in the form of a female douche, and component B) is one or more of an antimicrobial substance, an antifungal agent, live probiotic microorganisms, and live lactobacilli.
  - 28. A female douche comprising a eukaryotic cell surface blocking quantity of isoleucine.
  - 29. The composition of claim 11 wherein the composition is in the form of a nasal spray, and component B) is one or more of a decongestant, zinc ions, pseudoephedrine, dextromethorphan, diphenhydramine, and echinacea.
  - 30. A nasal spray comprising a eukaryotic cell surface blocking quantity of isoleucine.
  - 31. The composition of claim 11 wherein the composition is in the form of a wound ointment or cream, and component B) is one or more of an antimicrobial substance, and an anesthetic.

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- (32. A wound ointment or cream comprising a eukaryotic cell surface blocking quantity of isoleucine.
- 33. A gauze wound covering containing a eukaryotic cell surface blocking quantity of isoleucine.
- 5 (34) The composition of claim 11 wherein the composition is in the form of a skin ointment or cream.
  - 35. The composition of claim 11 wherein the composition is in the form of an oral supplement, and component B) is one or more of an antioxidant, a vitamin, live probiotic bacteria, live bifidobacteria, live streptococci, live entercocci, heat-killed probiotic bacteria, peppermint oil or extract, menthol, quassia, bistort, ginger, angelica, bayberry, chamomile, fish oil, a fatty acid, an omega-3 fatty acid, fiber, flaxseed, slippery elm, niacin, a plant extract, garlic or garlic extract, calcium, stannol esters, lutein, zeaxanthin, cryptoxanthin, isoflavone, an anti-inflammatory compound, aspirin, ibuprofen, and acetaminophen.
- 36. An oral dosage composition comprising a eukaryotic cell surface blocking quantity of isoleucine.
  - 37. The composition of claim 11 wherein-component B) is a comestible.
  - 38. The composition of claim 37 wherein the comestible is selected from the group consisting of a fermented milk food product, a nutritional bar, a baked cake, a baked cookie, a spreadable food product, a nutritional drink, a dairy product, a soup, an infant formula, and a baby food.
  - 39. The composition of claim 11 wherein component B) is an animal food.

40. The composition of claim 39 wherein the animal food contains at least one of the following: chicory, fiber, live probiotic bacteria, silage, grain, corn, soybeans, and wheat.